Service Coordination Board (SCB) Meeting Summary

Date: 18 September 2013

Members in attendance:

	Member	In Attendance
AES	John Maclean	√
	Geoff Pile	√
ASD	Michael Borland	
	Ali Nassiri	√
XSD	Mark Beno	√
	Chris Jacobsen	
	Jonathan Lang	√
Upgrade Project	Tom Fornek	√
	Mohan Ramanathan	√

Secretary: D. Ferguson
Also in attendance: R. Torres, S. Davey

Agenda

Review of 21 August 2013 meeting minutes
Review of Open Action Items
Project Report Discussion
New Business

- 8 ID-E New Sample Environment Project (Lang)
- Reprioritization of projects without M&S in FY2013 (Pile)

Meeting Summary

The meeting minutes from 21 August 2013 were approved with minor changes. Open action items were discussed. See below for details. New business discussed included 8 ID-E New Sample Environment Project and reprioritization of projects without M&S in FY2014. R. Torres provided an update on the project report. This report can be accessed through the following links

Permanent URL to the newest released revision: https://icmsdocs.aps.anl.gov/docs/idcplg?IdcService=DISPLAY_URL&dDocName=APS_1432632

Permanent URL to the selected https://icmsdocs.aps.anl.gov/docs/idcplg?IdcService=DISPLAY_URL&dDocNam

revision: e=APS_1432632&dRevLabel=27

Web Location: https://icmsdocs.aps.anl.gov/docs/groups/aps/@apsshare/@computersystems/documents/list/aps_1432632.pdf

Native File: Project Report Summary - August 2013 (APS_1432632).xlsx

Discussion: Create Discussion

New Action Items

1. Review project proposal 1713 for inclusion of design review. Provide updated information to R. Torres to include in the Project Report Summary [A. Nassiri]- Postponed
2. Obtain project proposal for Sector 35 strip line monitor relocation [R. Torres] – Open
3. Discuss with ASD management the appropriate temporary replacement for M. Borland on the Service Coordination Board [A. Nassiri] – Closed
4. Confirm posting of revised SCB charter to the webpage [S. Davey] – Closed
5. All Divisions to provide re-prioritization of the top five effort only (little to no M&S) projects to D. Ferguson [Pile, Beno, Nassiri] - Open
6. Design review evaluation of the re-prioritized projects updates to be sent to R. Torres for inclusion in the Project Report Summary [Pile, Beno, Nassiri] – Open
7. Provide A. Nassiri "submitted" and "draft" ASD project proposals [S. Davey]-Closed
8. Discuss ASD project proposals with management to determine status of projects [A. Nassiri] – Open
9. Send "Action Items Pending" email to effected SCB members prior to next meeting [Ferguson] - Closed

Open Action Items

1. Send email regarding project updates for ASD projects that will not be approved [Davey] – Open
2. Evaluate and document risk assessment for proposal 1713 (Beam Scraper) [Borland] – Postponed

Agenda Topic Review of Minutes from August 21, 2013 SCB meeting

Minor corrections to the minutes were suggested. These corrections have been incorporated into the final meeting minutes posted on the web.

Agenda Topic Review of Open Action Items

An estimate and project plan for proposal 1713 was submitted. The project report has been updated. The current project proposal needs to be evaluated for the need for a design review. Effort needs to be

re-evaluated as the current lead engineer is assigned 50% to the MBA project. Project 515 has been completed. Clarification was obtained between projects 515 and 481. The SCB charter has been revised. It has not been posted to the webpage yet. The project report summary template has been revised to capture and track design review. Currently project plans and the "Design Review Required" section of the Project Report Summary are populated with estimated data. This data needs to be reviewed and properly populated. It was discussed and decided that the SCB would ensure the need for design reviews is being properly evaluated within the Divisions. Divisional management would continue to maintain the Design Review process as per APS procedure. Effort for project 1153 has been confirmed. This action item has been closed. However, the SCB will continue to monitor the progress of this project against actual effort. Updates to the project proposal will most likely become necessary. S. Davey to provide A. Nassiri "submitted" and "draft" proposals for ASD. A. Nassiri to discuss with ASD to clarify which projects will not be completed. This will enable S. Davey to notify project management of project status going into FY14.

Agenda Topic Review Project Report Summary Discussion

Updates to the project plan are reflected in the summary below.

Approved:

AES 418 Replace Ion Pump Controller in PAR (Gagliano) (50%): Will be completed at the end of the shut-down.

AES 456 Insertion Device Control Upgrade (Farnsworth) (50%): Funding ($74.9K) almost fully spent.

ASD P-1154 X-ray BPM Enhancement (Decker/B. Yang) (32%). In all, we have made about 5% more progress towards the completion of the project. 1) ANSYS analysis validated the thermal viability of the newest design of diamond blade mounting scheme. Optimization of the materials and geometry of thermal transfer is in progress. 2) Vacuum chamber and support structure design of the Compton-scattering based XBPM is in progress. 3) Computer simulation of the x-ray signal generated by Compton scattering is in advanced stage.4) A tech note summarizing these preliminary studies are in preparation, to be released in September – October 2013 time-frame.

PSC P-1453 6-BM Beamline Installation (Erdmann) (85%) – Little progress due to shut-down activities.

XSD 482 Instrumentation of 1-ID-E Hutch for High Energy Diffraction (Benda) (48%): The MTS table was assembled and installed. Work shifted focus to the overhead rail system and Hydra 2.0. Sector 1 would like to have the overhead installed by Jan 2014 but it is a challenge that would require significant engineer effort. The current engineer is on loan from HEP and it is unknown what level of effort is available from him in FY14. NOTE: There are no hours reported in the greensheets by BC for this project during the month of August. Some effort was definitely spent on E-hutch related areas, however, so BC effort is underestimated in this report.

AeroTech (40%): The configuration of the Aerotech SMS was updated in CAD based on sector input. The model was also integrated within the overall hutch layout. A drawing was created showing each motion system component, capacity and range. Further feedback from scientists is required to progress on a final table height and overall design. A precision high-capacity double arc rotation stage is required and has been quoted. This is a critical and expensive component for this SMS.

MTS Table (95%): The table components arrived and were assembled within a 2 day timespan. It was immediately put into use for an August PUP at sector 1. There was little commissioning time and so the table still needs to be tweaked. The PUP continues in October and scientists do not want to touch the table at all. Tweaks or modifications will have to occur afterwards, mid-October or so. Modifications are not very extensive. The drawing set for the table still needs to be released. It will be released in its initial configuration and a revision will need to be made later on covering changes from the tweaks.

Overhead Rail (35%): Further evaluation and work is required to define the conical slits w/ manipulation system which will mount to the overhead rail. The team is working with Square-1 and other bidders to subcontract the manipulation system which is slated to go on the rail. An overall layout with all instrumentation is required to really understand the spatial range over which the overhead rail system must operate. Engineer manpower may become an issue in the new fiscal year.

Hydra 2.0 (8%): Some discussion occurred as to whether a more streamlined motion system with a smaller footprint could be used. In addition Sector 1 has added an additional detector (Dexela) to the plan which needs to be supported and moved by the same structure. The GE panels and Dexela detectors have somewhat overlapping travel ranges so a clever solution is required. Layout work is required to see spatial envelopes of the detectors, X-ray cone and other E-hutch instrumentation. Two competing designs need to be evaluated for merit.

Very Far (90%): Minimal change in status.

SAXS Table (60%): Minimal change in status.

XSD P-547 High-Temperature Sample Environment (Haljiti) (50%): Mechanically, the mount we made is perfect. Unfortunately the furnace itself not performing completely as expected due to control units. Waiting to resolve the issue with the vendor. Will not proceed with the 2nd one till the issues are resolved.

XSD P-1094 Mirror Support Stages and Wire Stages for J. Tischler (D. Shu) (95%): One PZT device has been returned to PI for repair with no cost.

XSD P-1098 Engineering of Modular Kirkpatrick-Baez Mirror Systems (D. Shu) (60%): The procurement of the laser interferometry was postponed. Estimated completion date moved to Dec. 2013.

No updates from:

AES P-420 Linac Water Station Rebuild (Wright) (65%)

ASD P-1373 Linac Transverse Deflecting Cavity (Smith) (22%) and ASD P-1374 APS New Electron Gun (Smith) (60%): Will submit status next month. My priority is to high power test the harm par circulator during this shutdown. An even higher priority now is to RF characterize both par cavities while the tunnel is still open to help in the effort for the new APS-U or MBA.

XSD P-1454 DOE Early Career Awards: Vacuum System with Motion System (Preissner) (40%)

Projects on hold:

AES P-1173 Accelerator Server Upgrades (60%) and AES P-1174 X-Ray Network and Server Upgrades (Sidorowicz) (70%): Due to the loss of funding there won't be any additional updates for August and September.

XSD P-543 Quick XAFS Mono for 9-BM (Haljiti) (5%): Project on-hold pending available Exxon funding. Expecting funding from Exxon the first quarter. Hoping to get APS matching funds also in 2nd quarter by Dec.

Beno/Lang: XSD high priority. Only project being funded. Change status to Provisionally Approved. Send out to GLs for effort commitment.

XSD P-546 Replacement of 11-ID EPS System and Beamline Diagnostics (Haljiti) (5%)

XSD 1097 High-Throughput Development for 11-ID-B (Haljiti) (20%) – completed preliminary design and submitted project plan detailing activities needed to proceed. Received commitment from group leaders: DenHartog approved MED resources. Rusthoven approved DD (40hrs) resources.

Beno: Project on hold due to funding.

Provisionally Approved:

XSD 508 11-BM Complete Assembly of Sample Changing Robot Hand (Chupas/Preissner) (47%) – Received commitment from group leaders: DenHartog approved MED resources. Ju Wang approved PS resources.

ASD P-1713 Sector 37 Scraper Upgrade - Louis Emery, Yong-Chul Chae, Leonard Morrison – Yong-Chul notes that the schedule is aggressive to meet the April shut-down in 2014 and he hopes the engineering design work can start as soon as possible. (Requested effort: CT 20 hrs., DD 400 hrs., MED Eng. 160 hrs., MOM Eng. 80 hrs., ASD Eng. 10 hrs., Physicist 160 hrs., 830 total hrs.)

SCB: per input from GLs below, project placed on hold till plan is reviewed and scope, schedule, and effort requests are better defined, including more realistic time-frame (i.e., Sept. shut-down vs. April). A. Nassiri will report back to SCB.

Farnsworth: Approved CTL resources.

Den Hartog: I do not believe the project can be accomplished according to the attached schedule. Leonard Morrison cannot provide the hours requested within the schedule time frame due to his prior commitments to RF mechanical operations, Team 4 tickets, projects 1373, 627, 1374, 1253, and the APSU MBA. We suggest a minimum of 12 weeks design time, 12-14 weeks machining time and 4-5 weeks of fabricating, assembly and testing time, approximate total hours 1240.

Goeppner: While not opposed to projects that require aggressive schedules, in this case I lack the confidence needed to commit MOM resources at this time. I strongly recommend that the SCB carefully review the Physics Specification Document to insure that the problems experienced in the previous designs are understood, and have been addressed in the new design, before authorizing this work to proceed.

XSD P-1753 GISAXS Sample Changer (Upgraded Sample Environments for 8-ID-E) - (Joseph Strzalka, Requester, Mike Fisher, Project Manager). Den Hartog: Please ensure that this project is on the agenda

for the next SCB so it can be provisionally approved. **Note: The SCB granted provisional approval to this project.**The requester is Joseph Strzalka and the project manager is Mike Fisher. M. Fisher submitted project plan: This project is made up of two tasks: 1) Develop, design and build a new multiple sample changer mechanism and chambers. 2) Develop and add Single Sample thermal Annealing at Temperature ~300oC with ramp control and quenching capability for the new thermal annealing chamber. Ideally both sets of mechanics would be developing in parallel to minimize errors and optimize functionality. (Requested effort: CT Eng. 120 hrs., DD 140 hrs., MED Tech 88 hrs., MED Eng. 490 hrs., SA 16 hrs., MOM Tech 72 hrs., 926 total hrs.)

Beno/Lang: Most of the M&S costs being funded by U of C. Change status to Provisionally Approved. Send to GLs for effort commitment, expecially for MED resources to start work.

Completed Projects:

XSD 487 2-ID-D Double Multilayer Monochromator (Lai/Erdmann) – Lai

XSD 515 Install new TXM system in 32-ID-C Hutch (De Carlo/Preissner) – Completed – De Carlo: The TXM at 32 installation is complete but there are two on going activities that still need to be completed - both are on-going. Per Mark Erdmann and Nicholas can comments below these activities can be considered as regular support activity, i.e. to be worked on/completed outside of the project proposal system. Project 515 will be closed.

- installation of granite stands under the instrument optical table

- finalize/add some control software features

Schwarz: The extra control software features are small tasks that weren't a part of the SCB proposal. It might be best if we roll those into our regular operations support.

Erdmann: I consider the engineering portion of the TXM project completed. We made an MED ticket request for the granite stands since they were not in the original scope of the project.

Miscellaneous:

ASD 1293 Conversion of A:H4 Correctors to Skew Quadrupoles (Emery) Emery complete project plan.

XSD-516 Low-profile MTS table - Benda: The project described by 516 is a part of 482 (one of the subprojects). It is not finished but it is should not be a separate project. I think P-516 should be eliminated.

XSD 517 Design and Fabrication of components to interface OxyGon vacuum furnace with Sector 1 MTS, including internal rotation stage – Benda: The scope of work this project covers has mostly been dealt with. There are a few outstanding things which we are trying to cover through use of medium sized support requests. It can be closed out at this point. Definitely not part of 482.

Farnsworth note: Minor technical/project mgt note: Are design review resources (i.e. :primarily reviewers time) accountable in this level of project plans? – SCB: effort will be difficult to track, not necessary to include in plans.

New Business

8 ID-E New Sample Enviroment Projects

This was discussed while reviewing the Project Report. See project 1753 notes.

Reprioritization of projects without M&S in FY2014

Due to the lack of budget and staffing issues for FY14 re-prioritization of the top five effort only (little to no M&S) projects for each of the division's projects is needed. After discussion it was decided to coordinate this request through e-mail rather than hold an additional meeting. This information is needed prior to the October 16, 2013 meeting.

Upgrade Project Update

T. Fornek discussed latest developments in the APS Upgrade Project. Staffing needs are being re-evaluated due to the impact of the redesign efforts.

Other Items

Sector 35 -Strip line monitor must be relocated. A project proposal has not yet been submitted with appropriated follow through.

Temporary Board Member replacement for M. Borland. The need for a temporary replacement to represent ASD was discussed. M. Borland has continuing commitments with the MBA redesign which are taking considerable time and effort.

Next Meeting: October 16, 2013, 401/B4100, 11:15